5. 20050124072. 08 Oct 04. 09 Jun 05. Personal care products with visual indicator of vaginitis. Boga, RameshBabu, et al. 436/111; G01N033/00.

G. 20050112085. 16 Oct 03. 26 May 05. Odor controlling article including a visual indicating device for monitoring odor absorption. MacDonald, John Gavin, et al. 424/76.1; A61L009/01.

G. 20050085739. 16 Oct 03. 21 Apr 05. Visual indicating device for bad breath. MacDonald, John Gavin, et al. 600/530; A61B005/08.

S. 20050084977. 16 Oct 03. 21 Apr 05. Method and device for detecting ammonia odors and helicobacter pylori urease infection. Boga, RameshBabu, et al. 436/113; G01N033/53 G01N033/00.

DERWENT-ACC-NO: 1980-26284C

DERWENT-WEEK: 198015

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TITLE: Treating waste water contg. organic cpds. and ammonia - by decomposing in rotating waterpermeable hollow filter contg. an inorganic filler coated with bacteria

PATENT-ASSIGNEE:

ASSIGNEE

CODE

CHIYODA CHEM ENG CONSTR CO

**CHIY** 

PRIORITY-DATA: 1978JP-0100089 (August 18, 1978)

Search Selected

Search ALL

**PATENT-FAMILY:** 

**PUB-NO** 

**PUB-DATE** 

LANGUAGE

**PAGES** 

MAIN-IPC

☐ JP 55028701 A

February 29, 1980

000

INT-CL (IPC): C02F 3/08

ABSTRACTED-PUB-NO: JP 55028701A

BASIC-ABSTRACT:

In decomposing organic matters and ammonia etc in waste water with bacteria, the improvement comprises carrying out the decomposing treatment using a partially water-immersed rotating waterpermeable hollow filter, the inner part of which is provided with inorganic filler having apparent specific gravity of <1.0, e.g. pearlite and Sirasu balloon etc., adhered with bacteria, so that rapid aerobic biological waste water treatment becomes possible without any peeling of bacteriand clogging of the filter.

In this rotating filter, peeling of bacteria adhered in excess to the surface of the filler is only carried out by the rotation, due to the fact that specific gravity of the filler is small and movement of the filler in the inner part of the rotating filter is gentle, and further oxygen supply to bacteria is increased and so reaction rate becomes very rapid, due to the fact that bacteria membrane is directly in contact with air in exposure to air, and further dissolution of oxygen in the water is increased by invasion of air inside the porous filler and into gap between each of the filler.

TITLE-TERMS: TREAT WASTE WATER CONTAIN ORGANIC COMPOUND AMMONIA DECOMPOSE ROTATING WATER PERMEABLE HOLLOW FILTER CONTAIN INORGANIC FILL COATING BACTERIA

**DERWENT-CLASS: D15** 

CPI-CODES: D04-B08; D04-B10;

	. <u>CN 1778963A</u> . Determination of blood <u>ammonia</u> content and blood <u>ammonia</u> diagnostic reagent WANG, E. C12Q001/48.
reage	97. <u>CN 1778946A</u> . Determination of blood <u>ammonia</u> content and blood <u>ammonia</u> diagnostic ent <u>kit</u> . WANG, E. C12Q001/32.
reage	98. <u>CN 1778945A</u> . Determination of blood <u>ammonia</u> content and blood <u>ammonia</u> diagnostic ent <u>kit</u> . WANG, E. C12Q001/32.
reage	99. <u>CN 1778938A</u> . Determination of blood <u>ammonia</u> content and blood <u>ammonia</u> diagnostic ent <u>kit</u> . WANG, E. C12Q001/26.
reage	100. <u>CN 1778937A</u> . Determination of blood <u>ammonia</u> content and blood <u>ammonia</u> diagnostic ent <u>kit</u> . WANG, E. C12Q001/25.

DERWENT-ACC-NO: 1993-148499

DERWENT-WEEK: 199318

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TITLE: <u>Urease</u> gene derived from Bacillus sp. TB-90 - decomposes <u>urea</u> into ammonia and carbon

di:oxide, used as diagnostic agent

INVENTOR: HIDAKA, M; MAEDA, M; MASAKI, H; NAKAMURA, A; UOZUMI, T; YONETA,

Y

PATENT-ASSIGNEE: SAPPORO BREWERIES (SAPB)

PRIORITY-DATA: 1990JP-0210178 (August 10, 1990)

Search Selected	Search ALL	<u> Clear</u>
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## PATENT-FAMILY:

	PUB-NO	PUB-DATE	LANGUAGE	<b>PAGES</b>	MAIN-IPC
	<u>JP 05084086 A</u>	April 6, 1993		020	C12N015/55
<b></b>	US 5298399 A	March 29, 1994		022	C12N015/57

## **APPLICATION-DATA:**

PUB-NO	APPL-DATE	APPL-NO	DESCRIPTOR
JP 05084086A	July 25, 1991	1991JP-0207217	
US 5298399A	July 18, 1991	1991US-0732242	

INT-CL (IPC): C12N 9/80; C12N 15/11; C12N 15/31; C12N 15/55; C12N 15/57; C12P 21/00; C12N 15/55; C12R 1/07; C12N 9/80; C12R 1/19

ABSTRACTED-PUB-NO: JP 05084086A BASIC-ABSTRACT:

Urease gene derived from Bacillus sp. TB-90 (FERM BP-795) is new. Also new are gene contg. a DNA sequence encoding for amino acid sequence of three subunits. DNA obtd. by introduction of the urease gene into E. coli vector and which is replicable in E. coli, a recombinant DNA contg. urease three subunits, the recombinant DNA which contains three open leading frame DNA sequence encoding for the amino acid sequence of the sequence of urease operon of Bacillus sp. TB-90, etc.

USE - Urease (RC 3.5.1.5) decomposes urea into ammonia and carbon dioxide and can be used as diagnostic agent. The process can provide urease through gene recombinant work

ABSTRACTED-PUB-NO: US 5298399A EQUIVALENT-ABSTRACTS:

The Bacillus sp. TB-90 (FERM BP-795) urease gene contains nucleic acid (cDNA) that encodes the prodn. three sub-units of the enzyme urease. Plasmids and expression vectors contg. this DNA are new. Escherichia coli cells have been transformed with these expression vectors and then propagated to produce the exogeneous enzyme. The active nucleotide sequence of the cDNA and the enzyme

aminoacid sequence are presented.

USE/ADVANTAGE - The enzyme is a reagent for clinical analysis and diagnosis. The recombinant urease has a greater stability than that obtd. from natural sources.

CHOSEN-DRAWING: Dwg.0/0 Dwg.0/4

**DERWENT-CLASS: B04 D16** 

CPI-CODES: B04-B02C3; B04-B04A1; D05-C03C; D05-H09; D05-H12;

DERWENT-ACC-NO: 1990-376291

DERWENT-WEEK: 199051

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TITLE: Detection of <u>urease</u> in endoscopic biopsies - by colour change of urea soln. contg. phenol red

indicator

INVENTOR: ISERHARD, R

PATENT-ASSIGNEE: ISERHARD R (ISERI)

PRIORITY-DATA: 1989BR-0002699 (May 19, 1989)

Search Selected Search ALL Clear

PATENT-FAMILY:

**PUB-NO** 

**PUB-DATE** 

LANGUAGE

**PAGES** 

**MAIN-IPC** 

BR 8902699 A

November 20, 1990

000 -

APPLICATION-DATA:

**PUB-NO** 

APPL-DATE

APPL-NO

**DESCRIPTOR** 

BR 8902699A

May 19, 1989

1989BR-0002699

INT-CL (IPC): C12Q 1/58

ABSTRACTED-PUB-NO: BR 8902699A

**BASIC-ABSTRACT:** 

The enzyme urease performed in endoscopic biopsies of gastro-duodenal mucous membrane by bacterial action, is detected by immersing the biopsy specimen in a gelatinous soln. contg. peptone 1.0 g/l., glucose 1.0, sodium chloride 5, monobasic K phosphate 2, Phenol Red 0.012, urea 20, Metronidazol 0.002, Gentamicine 0.24 and agar-agar 12 g/l., in dist. water, in presence of urease, ammonia and bicarbonate are liberated, raising the pH from 5.8 to over 6.0 and changing the colour of the gel from pale yellow to red. The anti-bacterial agents prevents contamination by bacteria from biopsy equipmen

ABSTRACTED-PUB-NO: BR 8902699A

**EQUIVALENT-ABSTRACTS:** 

DERWENT-CLASS: B04 D16 J04

CPI-CODES: B02-G; B04-B02C3; B06-C; B07-D09; B10-A13C; B11-C07B1; B12-K04A; D05-H09;

J04-B01;

- elle est coûteuse ;

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- la stabilité du réactif est relativement faible ;
- elle nécessite un équipement permettant de faire des mesures de densité optique dans l'ultraviolet (340 nanomètres), étant donc difficilement applicable dans les pays où les moyens techniques et économiques sont modestes;
- elle est difficilement utilisable pour les urines, car elle est sujette à l'interférence de l'ammoniac préexistant et, trop sensible, elle nécessite une dilution des urines car la concentration en urée y est trop importante. Ce pré-traitement des urines est très pénalisant pour des dosages en séries.

La présente invention vise à remédier à l'ensemble de ces inconvénients. A cet effet, selon l'invention, on propose de doser l'urée sur la base de la variation de la densité optique, après hydrolyse de l'urée par l'uréase, du milieu contenant l'urée et un composé chimique dont la coloration varie en fonction du pH (désigné parfois ci-après simplement par le terme «colorant»). Le schéma réactionnel est le suivant, le colorant étant le pourpre de phtaléine :

$$H_2N$$
 $C=0 + H_2O \xrightarrow{uréase} 2NH_3 + CO_2$ 
 $H_2N$ 
 $urée$ 

alcalinisation du milieu

pourpre ← pourpre de phtaléine ← incolore

Un tel procédé convient entre autres très bien pour le dosage de l'urée dans les urines. Sa mise en oeuvre est simple, ne comportant que le mélange de l'échantillon à doser avec un ou deux réactifs, sans nécessiter de chauffage. Ces réactifs sont stables pendant plusieurs semaines et ils ne sont pas corrosifs. En outre, le procédé

DERWENT-ACC-NO: 1989-170493

DERWENT-WEEK: 198923

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TITLE: Combating giant mud snails - using <u>urease</u> liq. obtd. from leguminosae plants or bacillus bacterial and urea to generate ammonia

PATENT-ASSIGNEE: TABATA T (TABAI)

PRIORITY-DATA: 1987JP-0271509 (October 26, 1987)

Search ALL Search Selected... Clear

**PATENT-FAMILY:** 

PUB-NO

**PUB-DATE** 

LANGUAGE

**PAGES** 

MAIN-IPC

JP 01113306 A

May 2, 1989

003

APPLICATION-DATA:

PUB-NO

APPL-DATE

APPL-NO

DESCRIPTOR

JP 01113306A

October 26, 1987

1987JP-0271509

INT-CL (IPC): A01N 47/28; A01N 53/02; A01N 59/00; A01N 63/02

ABSTRACTED-PUB-NO: JP 01113306A

**BASIC-ABSTRACT:** 

To kill jumbo mud snails (Viviparidae), a urease liq. obtd. from plants of Leguminosae or from incubated Bacillus bacteria is reacted with urea to generate ammonia by enzyme reaction.

Pref. Leguminosae plants include Glycine, Phaseolus, Mucuna and Pisum. Pref. Bacillus bacteria include Bacillus pasteurii, Bacillus mycoides, Bacillus subtilis and Bacillus natto.

USE/ADVANTAGE - Effective for rapidly killing jumbo mud snails.

In an example, paddy field soil was put in a dish (outer dia. 75mm, depth 90mm) to a height of 30mm, and 0.7g of urea was added. Next, urease liq. obtd. by ultrasonically triturating incubated bacteria of Bacillus pasteurii (1ml) was sprayed over this. Then 10 jumbo mud snails were put into the dish. After 10 hrs., all the jumbo mud snails had died due to the ammonia generated by the reaction of urea and urease.

ABSTRACTED-PUB-NO: JP 01113306A

**EQUIVALENT-ABSTRACTS:** 

CHOSEN-DRAWING: Dwg.0/0

**DERWENT-CLASS: C03** 

CPI-CODES: C05-C01; C12-N04;

immobilisierte Enzym inaktivieren würde.

Die vorliegende Erfindung wird nun im Detail unter Bezugnahme auf die Zeichnungen beschrieben, von denen Fig. 1 ein schematisches Ablaufdiagramm zur Ausübung der Erfindung darstellt, und die Figuren 2 und 3 Querschnitte durch eine Ausführungsform einer pH-Elektrodenzelle sind, die eine hydrophobe, Ammoniak-permeable Membran zur Ausübung der vorliegenden Erfindung enthält.

Gemäß Fig. 1 flißt eine wäßrige Probe, die Harnstoff enthält, in ein Bett aus immobilisierter Urease, das als Hydrolysezone wirkt, in dem die Probe eine Zeitlang auf einer Temperatur gehalten wird, die zur Hydrolyse des Harnstoffes zu Ammoniumionen ausreicht. Die Probe wird vorzugsweise so lange in Kontakt mit der immobilisierten Urease gehalten, daß nahezu der gesamte Harnstoff zu Ammoniumionen hydrolisiert wird. Diese Hydrolyse wird normalerweise in einigen Sekunden bis 30 Minuten oder länger beiTemperaturen von 0°C bis etwa 50°C und mehr verollständigt. Die Hydrolysereaktion verläuft etwa nach der folgenden Gleichung ab:

$$2H^{+} + H_{2}O + H_{2}N - C - NH_{2} \xrightarrow{Urease} 2NH_{4}^{+} + HCO_{3}^{-} und/oder CO_{2}$$

Es wird angenommen, daß die Urease bei einem pH-Wert von etwa 5 bis 9 für die Hydrolyse des Harnstoffes 509827/0543

DOCUMENT-IDENTIFIER: US 5384237 A

TITLE: Quaternary-ammonium phenylsulfonylacetate thermal-dye-bleach agents

## **Detailed Description Text** (49):

Auramine Dyes: A second preferred class of dyes is that of ketone imine dyes such as auramine dyes. Auramine dyes are derivatives of diarylmethanes and are prepared by the reaction of diarylketones such as <u>Michler's</u> Ketone, bis(4,4'-dimethylamino)benzophenone, with ammonium chloride in the presence of zinc chloride. Auramine dyes are commercially available.